**A Better Way for #4**

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| **Macromolecules** | **Elements Present** |
| Carbohydrates | C,H,O |
| Lipids | C,H,O |
| Proteins | C,H,O,N,S |
| Nucleic Acids | C,H,O,N,P |

**A Better Way for #5**

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| **Functional Group** | **Polar or Nonpolar** | **Found in Which Macromolecules?** |
| Hydroxyl Group  (-OH) | Polar | Carbohydrates  Lipids (only found in glycerol)  Proteins (only in some R groups)  Nucleic Acids (in 5-carbon sugars) |
| Methyl  (-CH3, -CH2) | Nonpolar | Lipids (in fatty acids)  Proteins (in some R groups) |
| Carboxyl  (-COOH) | Polar | Lipids (at very end of fatty acids)  Proteins (in each amino acid) |
| Carbonyl  (-CO) | Polar | Proteins (when amino acids link together, carboxyl group becomes a carbonyl group) |
| Amino Group  (-NH3+ or NH2) | Polar | Proteins (in all amino acids) |
| Sulfhydryl Group  (-SH) | Polar | Protein (in some R groups) |
| Phosphate Group (-PO42-) | Polar | Nucleic Acids  Lipids (only in phospholipids) |

**Part B**

1. Triglyceride (see fatty acid chains with lots of C and H, these chains are connected to a glycerol)
2. Amino Acid (central carbon bonded to 4 things: a carboxyl group, an amino group, a hydrogen atom, and an R group)
3. Polypeptide (several amino acids linked together)
4. RNA (one string of nucleotides, each nucleotide has a base, a five carbon sugar, a phosphate group)
5. Disaccharide (2 sugars)
6. Fatty Acid (a bunch of C’s and H’s in a chain)
7. Nucleotide (nitrogen base, a five carbon sugar, a phosphate group)
8. Amino Acid
9. Polysaccharide (several sugars linked together)
10. Monosaccharide (lots of hydroxyl groups 🡪 OH MY GOODNESS, IT MUST BE A SUGAR ☺ )